

Application No. 10/510,077
Response dated: July 3, 2008
Reply to Non-final Office Action dated: March 3, 2008

Amendments to the Drawings:

The attached drawing sheet includes corrections to FIG. 5. The corrections include a removal of the Korean characters without making any differences in the content of the present application and to correspond with the description thereof in the specification as originally filed. No new matter has been added.

Attachment: Replacement Sheet

REMARKS

Claims 1 and 3-7 have been amended and claim 2 has been canceled. Support for the amendments can be found at page 2, lines 11-13, page 4, lines 19 and 26-31 and page 6, lines 8-9, for example, and canceled claim 2. No new matter has been introduced.

Claims 1 and 3-11 are currently pending and under consideration. Reconsideration is respectfully requested.

112 Rejections of claims 4 and 5:

At page 2 of the Office Action, claims 4 and 5 were rejected under 35 U.S.C. 112, second paragraph. Claims 4 and 5 have been amended to overcome the 112 rejection. Thus, withdrawal of the 112 rejections is respectfully requested.

103(a) Rejections of claims 1-3, 6-10 and 11:

At page 3, claims 1-3, 6-8 and 10 were rejected under 103(a) as being unpatentable over Winker et al. (U.S. Patent No. 5, 504, 603) in view of Arakawa (U.S. Patent No. 6, 812,983); and at page 6, claims 9 and 11 were rejected as being unpatentable over Winker in view of Arakawa and in further view of Yang et al. (U.S. Patent No. 5,940,155). The rejections are respectfully traversed.

Regarding the 103(a) rejections of claims 1-3, 6-8 and 10:

Claim 1 has been amended to recite:

“A liquid crystal display comprising:

a liquid crystal panel assembly including two panels and a liquid crystal layer interposed between the panels and having first and second outer surfaces opposite each other;

first and second polarizers on the first and the second surfaces of the panel assembly, respectively;

a first a-plate film with reverse wavelength dispersion that birefringence increases as a wavelength of incident light increases, and is inserted between the first polarizer and the first surface of the panel assembly; and
a first hybrid c-plate compensation film inserted between the second surface of the panel assembly and the second polarizer or between the first a-plate film and the first polarizer.”

The Applicants respectfully submit that neither Winker nor Arakawa discuss or even suggest the Applicants “first a-plate film” as recited in independent claim 1, for example.

In contrast, in FIG. 2, Winker discloses a twisted nematic, transmissive type normally white LCD which includes a polarizer layer 222 and an analyzer layer 224, between which a LC layer 226 is disposed. The LC crystal layer 226 is sandwiched between a pair of glass plates 238 and 240 (see column 5, lines 5-23, for example). The Examiner asserts that Winker discloses “an a-plate compensation film” at FIG. 8; Table I on columns 9-10.

At page 4 of the Office Action, the Examiner admits that Winker fails to disclose the Applicant’s “...a first a-plate film with reverse wavelength dispersion that birefringence increases as a wavelength of incident light increases ...,” as recited in amended claim 1, for example. However, the Examiner asserts that Arakawa makes up for the deficiencies of Winker. The Applicants respectfully disagree with the Examiner.

The Applicants respectfully submit that the a-plate compensation film discloses in Winker at page 8 is an “a-plate compensation film” having forward wavelength dispersion, which is not comparable to the “first a-plate film” as discussed in claim 1, of the present invention, for example.

Further, Arakawa merely discloses a broad band retardation plate for a LCD, including positive or negative intrinsic double refraction values (see Abstract, for example). The Examiner asserts that column 2, lines 38-43 of Arakawa discloses the Applicants “*the first compensation film being an a-plate compensation film with reverse wavelength dispersion,*” as recited in claim 1. However, the Applicant respectfully submit that the cited portions of Arakawa disclose that the retardation values (Re) for wavelengths of 450nm, 550nm, and 650nm are such that the Re(450)<Re(550)<Re(650). The Applicants respectfully submit that the cited portions of Arakawa are not comparable to the Applicants “a first a-plate film with reverse wavelength

Application No. 10/510,077
Response dated: July 3, 2008
Reply to Non-final Office Action dated: March 3, 2008

dispersion” as recited in amended claim 1. Thus, as mentioned above, Arakawa fails to make up for the deficiencies of Winker, mentioned above.

Further, the dependent claims 2-11 also include patentably distinguishing features of their own. For example, claim 7 recites “the first a-plate film ranges about 5 nm through about 45 nm for a light wavelength of about 550nm, about (0.4-0.7) * (the retardation value for the light wavelength of about 550nm) for a light wavelength of about 400nm, and about (1.1-1.4) * (the retardation value for the light wavelength of about 550nm) for a light wavelength of about 650nm”. Neither of the foregoing references individually or combined, discuss the features as recited in claim 7, for example.

Regarding the 103(a) rejection of claims 9 and 11:

At page 6 of the Office Action, the Examiner admits that Winker fails to discuss the features are recited in claims 9 and 11 of the present invention, and attempts to take Official Notice that one of ordinary skill in the art would have been motivated to provide the Applicants “cell gap” as recited in claims 9 and 11. The Applicants respectfully disagree with the Examiner and traverse the Examiner’s assertion and request that the Examiner either provide a reference(s) to support his assertion or withdraw the rejection.

CONCLUSION:

All of the outstanding rejections are herein overcome. Reconsideration and withdrawal of all rejections and prompt issuance of a Notice of Allowance is respectfully requested. No new matter is added by way of the present Amendment and Remarks as support is found throughout the originally filed specification, claims, and drawings.

The Examiner is invited to contact Applicant’s attorney at the below-listed phone number regarding this Response or otherwise concerning the present application.

If there are any charges due with respect to this Amendment or otherwise, please charge them to Deposit Account No. 06-1130 maintained by Applicant’s attorneys.

Respectfully submitted,

CANTOR COLBURN LLP

Application No. 10/510,077
Response dated: July 3, 2008
Reply to Non-final Office Action dated: March 3, 2008

By: /James J. Merrick/

Date: July 3, 2008

James J. Merrick
Reg. No. 43,801
CANTOR COLBURN LLP
20 Church Street, 22nd Floor
Hartford, CT 06103-3207
Telephone (860) 286-2929
Facsimile (860) 286-0115
Customer No. 23413